

WHAT IS CLAIMED IS:

1. An information storage medium comprising:  
a user area to store user data;  
a defect management area to store defect  
5 information associated with defects on the user area;  
and  
an overwrite management area to store overwrite  
information associated with an overwrite count for the  
defect management area.
- 10 2. A medium according to claim 1, further  
comprising an auxiliary defect management area on which  
the defect information is replacement-recorded in  
accordance with the overwrite count indicated by the  
overwrite information.
- 15 3. A medium according to claim 1, further  
comprising an auxiliary defect management area on which  
the defect information is replacement-recorded in  
accordance with a defect generation state in the defect  
management area.
- 20 4. A medium according to any one of claim 1,  
wherein the defect management area includes the  
overwrite management area.
5. A medium according to claim 1, wherein the  
defect management area includes a plurality of areas  
25 used to redundantly store a plurality of pieces of the  
defect information, and  
the information storage medium comprises

a plurality of auxiliary areas used to simultaneously replacement-record the plurality of pieces of defect information stored in the plurality of areas in accordance with the overwrite count indicated by the  
5 overwrite information.

6. A medium according to claim 1, wherein the defect management area includes a plurality of areas used to redundantly store a plurality of pieces of the defect information, and  
10 the information storage medium comprises a plurality of auxiliary areas used to simultaneously replacement-record the plurality of pieces of defect information stored in the plurality of areas in accordance with a defect generation state in the defect  
15 management area.

7. An information recording apparatus for recording information on an information recording medium, which has a user area to store user data, a defect management area to store defect information  
20 associated with defects on the user area, and an overwrite management area to store overwrite information associated with an overwrite count for the defect management area, comprising:

a recording unit to record the user data, the  
25 defect information, and the overwrite information; and

a recording control unit to control the recording unit to record the defect information on the defect

management area, and to record the overwrite information on the overwrite management area in correspondence with the recording operation.

5           8. An apparatus according to claim 7, further comprising a replacement-recording unit to replacement-record the defect information on an auxiliary defect management area in accordance with the overwrite count indicated by the overwrite information.

10           9. An apparatus according to claim 7, further comprising a replacement-recording unit to replacement-record the defect information on an auxiliary defect management area in accordance with a defect generation state on the defect management area.

15           10. An apparatus according to any one of claim 7, wherein the recording unit controlled by the recording control unit records the overwrite information on the overwrite management area included in the defect management area.

20           11. An apparatus according to claim 7, wherein the recording unit controlled by the recording control unit redundantly records a plurality of pieces of the defect information on a plurality of areas included in the defect management area, and

25           the information recording apparatus comprises a replacement-recording unit to replacement-record the plurality of pieces of defect information recorded on

the plurality of areas to a plurality of auxiliary areas in accordance with the overwrite count indicated by the overwrite information.

5        12. An apparatus according to claim 7, wherein the recording unit controlled by the recording control unit redundantly records a plurality of pieces of the defect information on a plurality of areas included in the defect management area, and

10        the information recording apparatus comprises a replacement-recording unit to replacement-record the plurality of pieces of defect information recorded on the plurality of areas to a plurality of auxiliary areas in accordance with a defect generation state on the defect management area.

15        13. An information recording method for recording information on an information recording medium, which has a user area to store user data, a defect management area to store defect information associated with defects on the user area, and an overwrite management  
20        area to store overwrite information associated with an overwrite count for the defect management area, comprising:

25        recording the defect information on the defect management area, and recording the overwrite information on the overwrite management area in correspondence with the recording operation.

14. A method according to claim 13, further

comprising replacement-recording the defect information on an auxiliary defect management area in accordance with the overwrite count indicated by the overwrite information.

5           15. A method according to claim 13, further comprising replacement-recording the defect information on an auxiliary defect management area in accordance with a defect generation state on the defect management area.

10           16. A method according to any one of claim 13, further comprising recording the overwrite information on the overwrite management area included in the defect management area.

15           17. A method according to claim 13, further comprising:

            redundantly recording a plurality of pieces of the defect information on a plurality of areas included in the defect management area; and

20           replacement-recording the plurality of pieces of defect information recorded on the plurality of areas to a plurality of auxiliary areas in accordance with the overwrite count indicated by the overwrite information.

25           18. A method according to claim 13, further comprising:

            redundantly recording a plurality of pieces of the defect information on a plurality of areas included in

the defect management area; and

replacement-recording the plurality of pieces of  
defect information recorded on the plurality of areas  
to a plurality of auxiliary areas in accordance with .

5 a defect generation state on the defect management  
area.